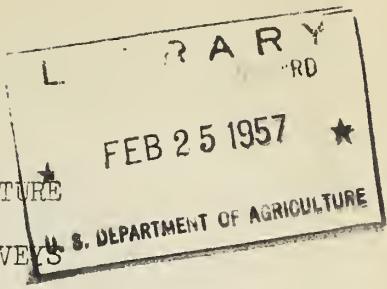


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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
FEDERAL-STATE COOPERATIVE SNOW SURVEYS

SPECIAL SNOW REPORT

January 1, 1955
SNOW SURVEY DATA

Snow water stored in the Montana mountains on January first, indicate below average water supply. Snow survey measurements made at a few KEY stations shown in the following pages, give the per cent deficiency and comparisons with 1954 and 1953 January first measurements. This data, collected by the Soil Conservation Service from surveys made by the U. S. Geological Survey, U. S. Forest Service, and Park Service, point to a serious shortage of irrigation water this coming season on all water sheds in the state.

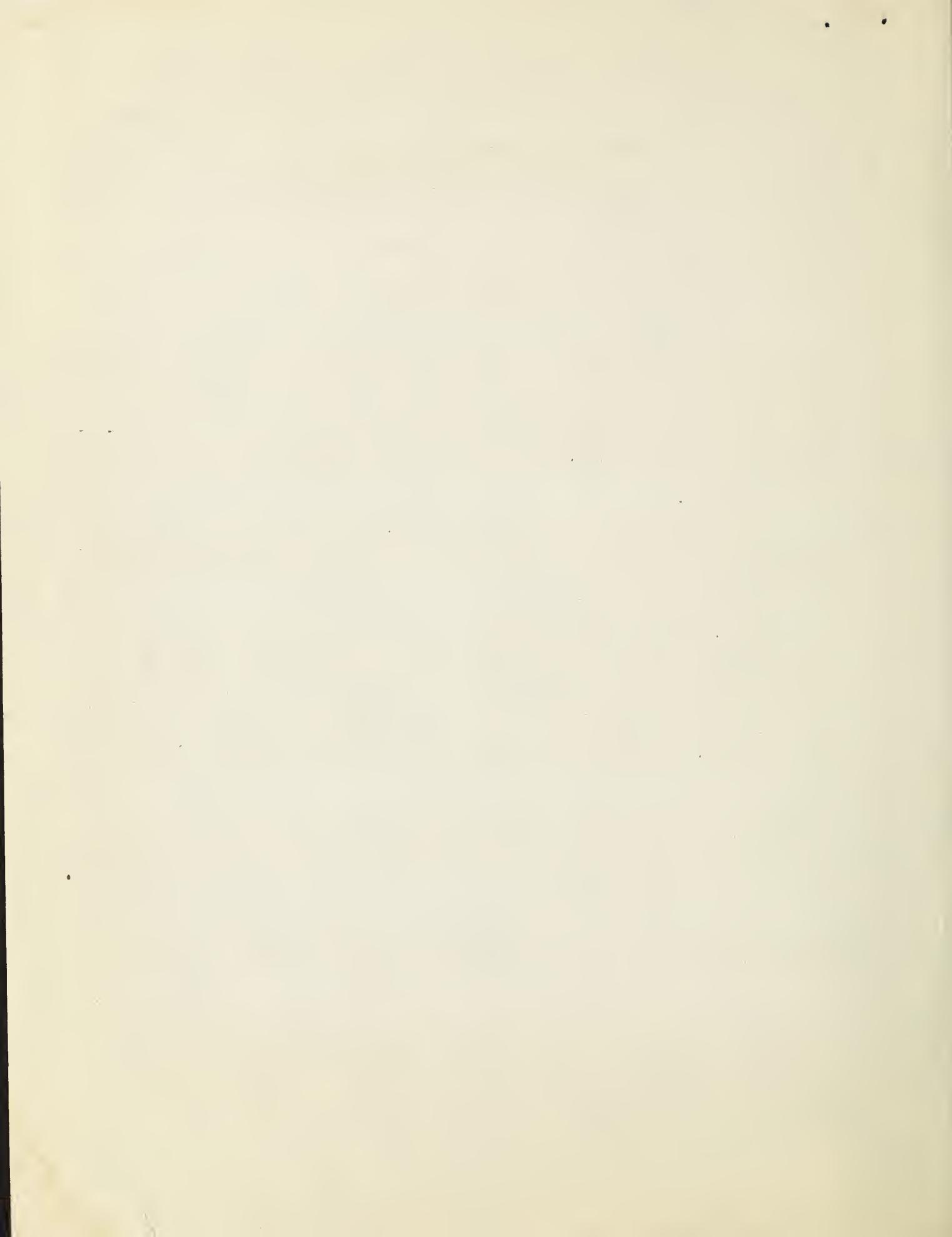
Measurements along the Continental Divide, correlated with other surveys in the Columbia River Basin, show a deficiency of approximately 50%. On the Missouri River Basin, the deficiency varies from 45% to 60% of average snow water content.

Precipitation records collected by the U. S. Weather Bureau, indicate that precipitation in western Montana for the Kootenai River Basin in British Columbia for the water year, 1955 to date, has been well below the average of the 10-year period, 1943-1952. During the fall months, September through November, precipitation totals were generally near 65% of average. The below average precipitation continued through December when only about 40% of average precipitation was observed. Several stations in western Montana recorded December precipitation totals among the lowest on record.

On the Missouri River Basin, above Fort Peck, for the same period of the accumulated data shows 60% average, while the Yellowstone River Basin averages 65%. Snow survey data and precipitation records made on the first of February, March, April and May will be better indicators of the potential runoff from snow-fed streams.

The outlook at the present date is for a serious shortage of irrigation water. Snow storms during the next three months could change this condition materially.

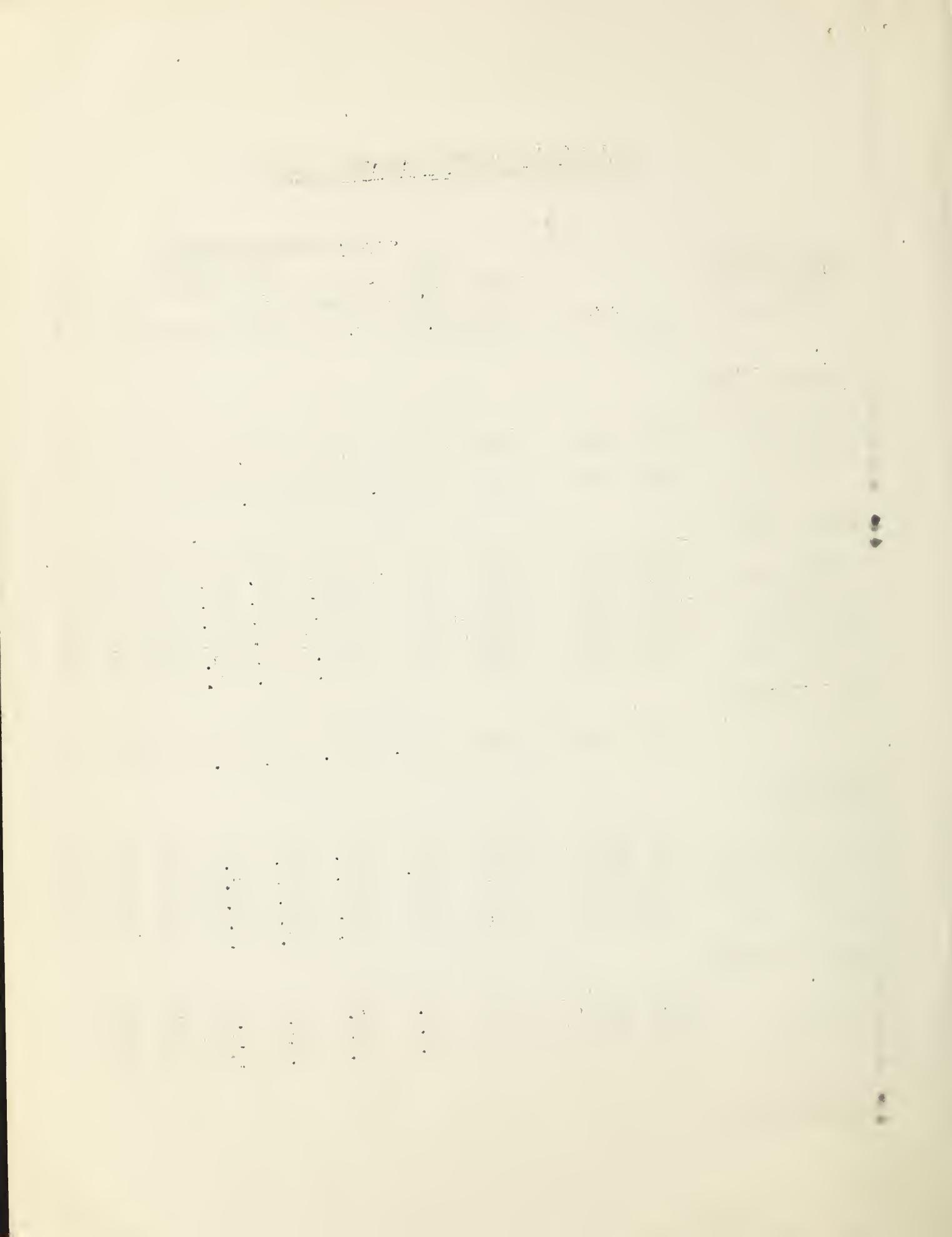
Ashton R. Codd
Soil Conservation Service
Montana Experiment Station
Bozeman, Montana



MONTANA SNOW SURVEYS - JANUARY 1, 1955

MISSOURI BASIN DRAINAGE BASIN AND SNOW COURSE**	No.	Elev.	SNOW COVER MEASUREMENTS								Y e a r s r e c o r d s
			Date of Survey	1955 Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1954	1953	Avg.	Avg.	
<u>JEFFERSON RIVER</u>											
(Rock-Beaverhead)											
*Camp Creek (Big Hole)	12E3	6800	1/4	18	2.5	2.7	6.7	4.0	62%	18	
Gibbons Pass	13D2	7100	1/3	30	5.5	10.8	7.0	10.7	51%	5	
<u>MADISON RIVER</u>											
Hebgen	11E5	6550	12/29	11	1.8	5.3	5.1	5.4	33%	20	
W. Yellowstone	11E7	6700	12/29	12	2.1	3.7	4.7	4.9	43%	17	
21-Mile	11E6	7150	12/29	16	3.0	7.8	6.9	7.5	40%	16	
*Big Springs	11E9	6500	12/28	21	3.3	6.1	7.0	7.0	47%	19	
*Island Park	11E10	3600	12/29	16	2.4	4.5	6.2	3.6	43%	19	
*Valley View	11E8	6500	12/28	12	1.2	2.4	5.4	5.0	24%	18	
<u>GALLATIN RIVER</u>											
21-Mile	11E6	7150	12/29	16	3.0	7.8	6.9	7.5	43%	17	
<u>MISSOURI RIVER MAIN STEM</u>											
Chessman Res.	12C5	6200	12/31	6	0.9	1.7	2.1	2.1	43%	19	
Tenmile, Lower	12C2	6250	1/2	13	1.5	3.0	3.0	2.7	56%	19	
Tenmile, Middle	12C3	6800	1/3	16	2.7	4.3	3.8	4.6	59%	20	
Tenmile, Upper	12C4	8000	1/3	19	3.7	5.2	4.4	5.8	64%	20	
Marias Pass	13A5	5250	12/30	19	4.2	10.8	3.8	7.2	58%	20	
<u>UPPER YELLOWSTONE</u>											
Canyon	10E3	7750	12/29	21	3.8	4.8	3.3	6.4	59%	9	
Cooke City	10D7	7400	1/3	14	3.2	3.3	5.6	4.4	78%	7	
Lake Camp	10E4	7850	1/1	14	1.8	3.2	2.6	4.4	41%	6	

*Adjacent Basin



MONTANA SNOW SURVEYS - JANUARY 1, 1955

COLUMBIA BASIN DRAINAGE BASIN AND SNOW COURSE **	No.	Elev.	Date of Survey	1955 Snow Depth Content (In.)	SNOW COVER MEASUREMENTS					Years Record
					Water (In.)	1954	1953	Avg.	Water Content (In.) %	
<u>BITTERROOT</u>										
Gibbons Pass	13D2	7100	1/3	30	5.5	10.8	7.0	10.7	51%	5
<u>FLATHEAD RIVER</u>										
Desert Mountain	13A2	5600	1/3	19	2.9	5.7	3.4	6.4	45%	5
Marias Pass	13A5	5250	12/30	19	4.2	10.8	3.8	7.2	58%	20
<u>UPPER CLARK FORK</u>										
Coyote Hill	13B11	4200				5.2	3.4	5.5		3
Chessman Res.	12C5	6200	12/31	6	0.9	1.7	2.1	2.1	43%	19
Lubrecht For. #6	13C8	5400	1/3	10	0.8	0.9	0.9	1.6	50%	5
Tenmile, Lower	12C2	6250	1/2	13	1.5	3.0	3.0	2.7	56%	19
Tenmile, Middle	12C3	6800	1/3	16	2.7	4.3	3.8	4.6	59%	20
Tenmile, Upper	12C4	8000	1/3	19	3.7	5.2	4.4	5.8	64%	20
*Lookout	15B2	5250	1/3	49	10.9	18.8	9.1	18.2	60%	5

*Adjacent Basin

